Rosuvastatin 10 mg was effective in the reduction of TC in a Scottish General Practice. The majority of patients were able to achieve SIGN targets and many patients also achieved the lower JBS2 targets.

PCV7

REACHING AWMSG TARGETS AND BEYOND-A RETROSPECTIVE AUDIT OF TARGETS ACHIEVED THROUGH USE OF ROSUVASTATIN IN WELSH GENERAL PRACTICE

Moore RP[1], Chapman JR[1], Davies EJ[1], Davies SH[1], Davies N[1], Harfoot DA[1], Emmas CE[2]
[1]Towers Surgery, Barry, UK, [2]AstraZeneca UK, Luton, UK

OBJECTIVES: The All Wales Medicines Strategy Group (AWMSG) recommends that at risk patients should be treated to a total cholesterol (TC) target of <5 mmol/L and low density lipoprotein-cholesterol (LDL-C) <3 mmol/L. Recent Joint British Societies Guidelines (JBS2, 2005) advise patients be treated to TC <4 mmol/L and LDL-C <2 mmol/L. An audit was conducted to determine the effect of the new guidelines on the proportion of patients achieving target cholesterol levels with rosuvastatin. **METHODS:** General Practice records were searched to identify patients who had been prescribed rosuvastatin 10 mg and the following data recorded: previous statin therapy, last cholesterol result on that statin and first cholesterol test on rosuvastatin. **RESULTS:** A total of 337 patients who had been prescribed rosuvastatin were identified. Of these 273 patients prescribed rosuvastatin 10 mg had both a pre- and post-rosuvastatin treatment TC result, 33 had LDL-C results. The majority of patients were statin-naive (195), others had previously been prescribed atorvastatin mean dose 18 mg (n = 45), simvastatin mean dose 20 mg (n = 29) or pravastatin mean dose 23 mg (n = 4). Prior to treatment with rosuvastatin, 11% (29/273) had a TC <5 mmol/L, increasing to 79% (215/273) after treatment with rosuvastatin 10 mg. On average patients experienced a 1.6 mmol/L (26%) reduction in TC. The proportion of patients with LDL-C <3 mmol/L improved from 12% (4/33) to 94% (31/33) on rosuvastatin. On average patients experienced a 1.6 mmol/L (42%) reduction in LDL-C. Improvements were also seen against JBS2 targets; patients with TC <4 mmol/L improved from 0% prior to rosuvastatin to 32% on rosuvastatin 10 mg and similarly patients with LDL-C <2 mmol/L improved from 0% to 39%. **CONCLUSIONS:** Rosuvastatin 10 mg wass effective in the reduction of TC and LDL-C in a Welsh general practice. The majority of patients were able to achieve AWMSG targets and many patients also achieve the recommended lower JBS2 targets.

PCV8

THE EFFECTIVENESS OF ROSUVASTATIN COMPARED WITH OTHER STATINS—RESULTS FROM A ROUTINE CLINICAL PRACTICE SETTING IN THE UK

Hirsch MW[1], O'Donnell JC[1], Jansen JP[2]
[1]AstraZeneca Ltd, Macclesfield, Cheshire, UK, [2]Mapi Values, Houten, The Netherlands

OBJECTIVES: To compare the effectiveness of statins in a real world setting as measured by percentage low density lipoprotein cholesterol (LDL-C) reduction and percentage total cholesterol (TC) reduction in patients newly initiated on statin therapy. **METHODS:** For this retrospective cohort study, patients newly initiated on common start doses of statin therapies (rosuvastatin 10 mg, simvastatin 10/20 mg, pravastatin 20/40 mg and atorvastatin 10/20 mg) between January 1, 2003 and August 31, 2005 were identified from the UK DIN-LINK database. Patients with no dyslipidemic therapy in the 12 months preceding their initial statin prescription and an LDL-C or TC measurement less than 6 months before and at least 1 month after initiating statin therapy were included in the study. Adjusted percent LDL-C reductions and percent TC reductions were compared using linear regression techniques. **RESULTS:** A total of 2151 patients with complete LDL-C data were identified. Rosuvastatin (n = 159), atorvastatin (n = 836), simvastatin (n = 1107) and pravastatin (n = 49) groups were similar with respect to mean age (64.5, 64.4, 65.1 and 65.1 years respectively) and baseline LDL-C levels (4.4, 4.3, 4.3 and 4.0 mmol/L respectively). After adjusting for age, gender, baseline LDL-C, therapy duration and 2003 European guideline risk factors, patients initiated on rosuvastatin achieved a significantly greater percentage LDL-C reduction (44.8%; 95% confidence interval 42.1%–47.4%) than patients initiated on atorvastatin (40.4%; 39.2%–41.5%), simvastatin (36.5%; 35.5%–37.5%) or pravastatin (29.9%; 25.1%–34.5%): all $p < 0.01$. Similarly, in patients where complete TC data was available (n = 7070), patients initiated on rosuvastatin (n = 475) had a significantly greater adjusted percentage TC reduction (31.3%; 30.1%–32.5%) than patients initiated on atorvastatin (n = 2662; 28.2%; 27.7%–28.7%), simvastatin (n = 3665; 25.3%; 24.9%–25.7%) or pravastatin (n = 268; 20.7%; 19.1%–22.3%): all $p < 0.0001$. **CONCLUSIONS:** In patients newly initiated on usual start doses of statins in routine practice, rosuvastatin was more effective in lowering both LDL-C and TC than atorvastatin, simvastatin and pravastatin.

PCV9

NON-PERSISTENT USE OF ANTIHYPERTENSIVE DRUGS LEADS TO INCREASED RISK OF HOSPITALIZATIONS FOR ACUTE MYOCARDIAL INFARCTION OR STROKE

Breekveldt-Postma NS[1], Siiskonen SJ[1], Penning-van Beest FJ[1], Falvey H[2], Vincze G[2], Erkens JA[1], Herings RM[1]
[1]PHARMO Institute for Drug Outcomes Research, Utrecht, The Netherlands, [2]Novartis Pharma AG, Basel, Switzerland

OBJECTIVE: Low adherence to antihypertensive drug (AHT) treatment may limit patient's benefits in terms of a reduction of cardiovascular and cerebrovascular disease. This study investigated the relationship between persistence with antihypertensive drugs and risk of myocardial infarction (MI) or stroke in daily practice. **METHODS:** From the PHARMO record linkage system comprising, among other medical information, the medication histories and hospital discharge diagnoses of >2 million inhabitants in The Netherlands, new users of AHT were identified between 1993–2002. Persistence with AHT was determined by summing the number of days of continuous treatment (gaps between dispensings <60 days). Persistent patients remained on AHT for 24 months. The outcome of interest was the first hospital admission for MI or stroke occurring two or more years after initiation of AHT therapy. Patients were classified at high, intermediate or low cardiovascular risk based on other cardiovascular drug use and hospitalizations during the first two years of follow-up. **RESULTS:** The study included 98,485 patients of whom 16% were at high cardiovascular risk. About 50% (n = 48,548) of all patients were persistent with AHT for two years. Multivariate analyses showed that persistent users of AHT had a statistically significant lower risk for MI/stroke compared to non-persistent users (RRadj = 0.88; 95%CI: 0.82–0.94). The association was stronger in the low/intermediate risk group (RRadj = 0.85; 95%CI: 0.79–0.92) than in the high risk group (RRadj = 0.95; 95%CI: 0.83–1.09). **CONCLUSION:** Non-persistent use of AHT in daily practice leads to increased risk of hospitalizations for MI or stroke.